



Mathematics Reference Sheet

Formulas

Square	$Area = s^2$
Triangle	$Area = \frac{1}{2}bh$
Rectangle	$Area = lw$ $Perimeter = 2l + 2w$
Trapezoid	$Area = \frac{1}{2}h(b_1 + b_2)$
Circle	$Area = \pi r^2$ $Circumference = \pi d$ or $Circumference = 2\pi r$
Pi	$\pi \approx 3.14$

Fahrenheit to Celsius	$C = \frac{5}{9}(F - 32)$
Celsius to Fahrenheit	$F = (\frac{9}{5}C) + 32$

Simple Interest $I = prt$

Distance Formula $D = \sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$

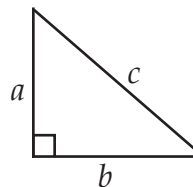
Midpoint Formula:
For a line segment with endpoints (a,b) and (c,d), the midpoint is:

$$\left(\frac{a+c}{2}\right), \left(\frac{b+d}{2}\right)$$

Right Triangular Prism	$Volume = \frac{1}{2}bhl$
Rectangular Solid	$Volume = lwh$ $Surface Area = 2(lw + hw + hl)$
Right Cylinder	$Volume = \pi r^2h$ $Surface Area = 2\pi r^2 + 2\pi rh$
Sphere	$Volume = \frac{4}{3}\pi r^3$ $Surface Area = 4\pi r^2$
Right Cone	$Volume = \frac{1}{3}\pi r^2h$
Square Pyramid	$Volume = \frac{1}{3}lwh$

Distance $d = rt$

Pythagorean Theorem $a^2 + b^2 = c^2$



where a and b are the legs of the triangle and c is the hypotenuse

Standard Form: $Ax + By = C$

Slope-Intercept Form: $y = mx + b$

Point-Slope Form: $y - y_1 = m(x - x_1)$

Conversions

- 1 yard = 3 feet = 36 inches
- 1 mile = 1760 yards = 5280 feet
- 1 acre = 43,560 square feet
- 60 seconds = 1 minute
- 60 minutes = 1 hour

- 8 fluid ounces = 1 cup
- 2 cups = 1 pint
- 2 pints = 1 quart
- 4 quarts = 1 gallon
- 16 ounces = 1 pound

- 1 kilometer = 1000 meters
- 1 meter = 100 centimeters
- 1 centimeter = 10 millimeters
- 1 kilogram = 1000 grams
- 1 liter = 1000 milliliters